

REMARKS/ARGUMENTS

Claims 1, 4-6, 9, 11 and 12 remain in this application. Claims 2, 3, 7, 8 and 10 have been canceled.

The Examiner has found Claims 11 and 12 allowable.

Antecedent support for the amendments to Claims 1 and 6 are found in Claims 2 and 3, and 7 and 8, respectively, and page 5, lines 17-19 and page 6, lines 4 and 5.

The Examiner has rejected Claims 1-3, 6-8 and 10 as being anticipated by Klink. Applicants respectfully traverse this rejection.

Referring to Klink, there is disclosed a method for examining the connectivity of links in MPLS networks. Klink teaches that MPLS-OAM packet flow is formed from MPLS-OAM packets that are inserted into the usual dataflow at the start of a segment and can be removed from this again at the end of the segment. They can be recorded and edited along the connection LSP, at the connection points, without intervention into the transmission process. See paragraph 24.

Before MPLS-OAM packets can be transmitted via the MPLS a network, the endpoints of the associated MPLS-OAM segment must be defined. The definition of source and sink from MPLS-OAM segment is not necessarily permanently specified for the duration of the connection. This means that the relevant segment can be reconfigured, for example by fields in the signaling protocol. See paragraph 25.

For monitoring of the connectivity of an MPLS connection LSP, special MPLS-OAM packets, referred to as OAM-ECHO packets, are defined. The MPLS-OAM packets are provided with a special label. The OAM-ECHO packets formed in this way are inserted into the flow of useful information. See paragraph 31.

Klink teaches a characteristic of the ECHO function is that a single OAM-ECHO packet sent in the source (downstream) sends back a plurality of packets as an answer, and in fact a packet for each connection point in a node through which the assigned connection LSP is routed. See paragraph 32. The ECHO function is a very useful means of checking where there is a requirement for connectivity of a connection LSP in an MPLS network. The complete network can be checked for connectivity before an MPLS network is brought into service, or special connections can be checked through in the event of a complaint by a customer. See paragraph 34.

Each further connection point connected to the sink forwards the OAM-ECHO packet further in the direction of the sink and at the same time generates a copy of it. The copies generated at the connection points are then further processed. See paragraph 36. First, the bit in the information part of the packet that designates the direction of transmission is changed from downstream to upstream. A location identifier is also entered in the information part of the OAM-ECHO packet. This is representative of the nodes of the MPLS code node wherein the processing was carried out. The location identifier also gives the assigned connection points. The subsequent further processing of the packet code depends on whether a bidirectional or unidirectional mode is to be used. See paragraph 37. In the case of the unidirectional mode, no feedback channel is necessary and the copy packet is stored in the MPLS node. The packets are then collected from all the MPLS nodes via signaling protocols and sent back to the source. In the case of a bidirectional mode, a feedback channel for the assigned connection LSP is

necessary to send back the copy OEM-ECHO packet to the source where it was originally inserted. See paragraph 39.

In regard to Claim 1 of applicants, there is the limitation of "the OAM path matrix disposed at each node which identifies the connection points and the fault management and performance monitoring conditions". It is respectfully submitted that Klink does not teach or suggest placing this limitation.

Furthermore, in regard to the limitation of Claim 3, now in Claim 1, there is the limitation of "an OAM path matrix disposed at each node which identifies the connection points and fault management and performance monitoring conditions." It is respectfully submitted that paragraphs 36 and 37 of Klink, which the Examiner cites as teaching the limitation of Claim 3 (now in Claim 1), not only does not teach an OAM path matrix, but does not teach any type of path matrix which identifies the connection points and fault management and performance monitoring conditions. All of these three types of information are required to be present in the path matrix of the invention of Claim 3. Paragraphs 36 and 37 are silent about including all these three types of information in any type of memory let alone in an OAM path matrix. It is respectfully submitted that applicants disagree with the Examiner's statement in the Office Action that a matrix by definition is a place or point from which something else originates. Here, the OAM path matrix is a structure which stores the connection points and the fault management and performance monitoring conditions. Accordingly, Claim 1 is patentable for this reason. Claim 8 is also additionally patentable for the same reason.

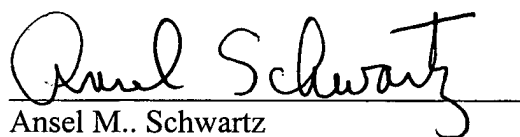
Claims 4 and 5 are dependent to parent Claim 1 and are patentable for the reasons Claim 1 is patentable.

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Claim 6 is patentable for the reasons Claim 1 is patentable. Claim 9 is dependent to parent Claim 6 and is patentable for the reasons Claim 6 is patentable.

In view of the foregoing amendments and remarks, it is respectfully requested that the outstanding rejections and objections to this application be reconsidered and withdrawn, and Claims 1, 4-6, 9, 11 and 12, now in this application be allowed.

Respectfully submitted,

A handwritten signature in black ink, reading "Ansel Schwartz", written over a horizontal line.

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